

**Recovery from the pandemic: Evidence-based public policy to safeguard Australian health**

Selina N Lo  
Senior Research Fellow  
Monash University  
Monash Sustainable Development Institute  
Melbourne, Victoria, Australia

Consulting Editor  
Lancet Ltd  
Editorial Department  
London, UK

Anna Skarbek  
CEO  
Monash University  
Climateworks  
Monash Sustainable Development Institute  
Melbourne, Victoria, Australia

Anthony Capon  
Director  
Monash University  
Monash Sustainable Development Institute  
Melbourne, Victoria, Australia

In Australia, 2020 began with raging bushfires, and we now confront the SARS-CoV-2 pandemic. While health protection is currently at the top of the public policy agenda, can we rise from these huge ruptures and ‘build back better’?

The full health costs of the bushfires, including the mental health toll, are yet to be quantified. No sooner had the bushfires abated then the battle against the pandemic began. The immediate public health response has been well managed in Australia (1). By international comparisons, the number of cases and deaths has remained low, with government leaders listening to health experts and acting on evidence, including the need for strict physical distancing in the absence of a vaccine.

As governments move to revitalise the economy with financial stimulus, what guidance can health experts provide to inform this stimulus?

One clear priority is that stimulus accelerates the decarbonisation of the Australian economy. Climate change is a recognised health issue. Published as the bushfires erupted, the 2019 *MJA–Lancet Countdown on Health and Climate Change* report (2) found that Australia is extremely vulnerable to the impacts of climate change on health. There are also health co-benefits from action on climate change. The clearest example is the transition to renewable energy generation. Globally, in 2015 alone, more than 460,000 preventable deaths were attributable to coal burning (3). An urgent transition to renewable energy would be an evidence-based public policy response to these deaths and assist a global green recovery from the pandemic which is called for by WHO (4).

Australia is well placed to lead such a recovery as indicated in a recent report by ClimateWorks Australia (5) *Decarbonisation Futures: Solutions, actions and benchmarks for a net zero emissions Australia* which provides a blueprint to achieve net zero emissions by 2050 through accelerated uptake of mature zero emission technologies and the rapid development and commercialisation of emerging zero emission technologies in harder to abate sectors. (See Table)

Beyond stimulus for decarbonisation, investments in affordable housing, mass transit infrastructure, safe routes for walking and cycling, regeneration of degraded ecosystems and infrastructure to support working from home would also benefit health through reduced homelessness, improved levels of physical activity and improved urban air quality.

Australia has been successful in controlling the pandemic because of evidence-based decision making. It is essential that decisions about the stimulus for economic recovery are similarly grounded in evidence. The health and wellbeing of current and future generations of Australians depends on it.

## **References**

1. Coghlan B, Majumdar SS, Pedrana A, et al. A strategic framework to ease community-wide Covid-19 suppression measures. *Med J Aust* 2020.
2. Zhang Y, Beggs PJ, Bambrick H, et al. The *MJA–Lancet* Countdown on health and climate change: Australian policy inaction threatens lives. *Med J Aust* 2018; 209: 474.e1-474.e21.

3. Watts N, Amann M, Arnell N, et al. The 2018 report of the *Lancet* Countdown on health and climate change: shaping the health of nations for centuries to come. *Lancet* 2018; 392: 2479-2514.
4. WHO Manifesto for a healthy recover from Covid-19: prescriptions for a healthy and green recovery from COVID-19 Published online May 26 2020 Accessed 9 June 2020 <https://www.who.int/news-room/feature-stories/detail/who-manifesto-for-a-healthy-recovery-from-covid-19>
5. ClimateWorks Australia. Decarbonisation Futures: Solutions, actions and benchmarks for a net zero emissions Australia. Melbourne: ClimateWorks Australia, 2020. <https://www.climateworksaustralia.org/resource/decarbonisation-futures-solutions-actions-and-benchmarks-for-a-net-zero-emissions-australia/> Accessed June 10 2020






TABLE: In the past five years the technical gap has closed making achieving zero emissions possible in all sectors

	Demonstrated and mature Solutions	Emerging Solutions
Electricity	100% renewables (including batteries), demand management	<i>There are sufficient demonstrated mature solutions to decarbonise these sectors. However, emerging solutions could decrease costs and deployment of scale.</i>
Buildings	Deep energy efficiency, electrification	
Transport	Electric and fuel-cell vehicles for light road transport	Biofuels, synfuels, electrification, ammonia or hydrogen for other transport
Industry	Energy efficiency, circular economy, proven electrification, bioenergy and bio-feedback, industrial CCS	Material substitution, high grade heat electrification, solar thermal, hydrogen
<i>Agricultural land</i>	<i>Sustainable agricultural practices, plant-based substitutes, fertiliser management, carbon forestry</i>	<i>Lab food, enteric fermentation treatments (such as livestock vaccines)</i>

*Decarbonisation Futures: Solutions, actions and benchmarks for a net zero emissions*

*Australia.* Melbourne: ClimateWorks Australia, 2020.

TABLE 2.1: Summary table of key emissions-reduction solutions by sector

		DEMONSTRATED + MATURE SOLUTIONS	EMERGING SOLUTIONS
	<b>ELECTRICITY</b>	100% renewables, storage (including batteries), demand management	<i>There are sufficient demonstrated and mature solutions to decarbonise these sectors. However, emerging solutions could decrease costs and aid deployment at scale.</i>
	<b>BUILDINGS</b>	Deep energy efficiency, electrification	
	<b>TRANSPORT</b>	Electric and fuel-cell vehicles for light road transport	Biofuels, synfuels, electrification, ammonia or hydrogen for other transport
	<b>INDUSTRY</b>	Energy efficiency, circular economy, proven electrification, bioenergy and bio-feedstocks, industrial CCS	Material substitution, high grade heat electrification, solar thermal, hydrogen
	<b>AGRICULTURE + LAND</b>	Sustainable agriculture practices, plant-based substitutes, fertiliser management, carbon forestry	Lab food, enteric fermentation treatments (such as livestock vaccines)